

## Unit 1 Student Self-Assessment

After completing Unit 1, please mark how much you agree with the following statements.

If you want to brush up on any of these skills, refer to the lesson heading above it.

I can...	I can	Almost	Not yet
<b>Lesson 1.1: Exploring Expressions and Equations</b>			
Tell which quantities in a situation can vary and which ones cannot.			
Explain the meaning of the term “constraint.”			
Use letters and numbers to write expressions representing the quantities in a situation.			
<b>Lesson 1.2: Writing Equations to Model Relationships, Part 1</b>			
Tell which quantities in a situation can vary and which ones cannot.			
Use letters and numbers to write equations representing the relationships in a situation.			
<b>Lesson 1.3: Writing Equations to Model Relationships, Part 2</b>			
Use words and equations to describe the patterns in a table of values or in a set of calculations.			
Use representations, like diagrams and tables, to help make sense of a described situation and write equations for it.			
<b>Lesson 1.4: Equations and Their Solutions</b>			
Explain what it means for a value or pair of values to be a solution to an equation.			

I can...	I can	Almost	Not yet
Find solutions to equations by reasoning about a situation or by using algebra.			
<b>Lesson 1.5: Equations and Their Graphs</b>			
Use graphing technology to graph linear equations and identify solutions to the equations.			
Explain how the coordinates of the points on the graph of a linear equation are related to the equation.			
Explain the meaning of points on a graph in terms of the situation it represents when given the graph of a linear equation.			
<b>Lesson 1.6: Equivalent Equations</b>			
Tell whether two expressions are equivalent and explain why or why not.			
Identify the moves that can be made to transform an equation into an equivalent one.			
Explain what it means for two equations to be equivalent and how equivalent equations can be used to describe the same situation in different ways.			
<b>Lesson 1.7: Explaining Steps for Rewriting Equations</b>			
Explain why some algebraic moves create equivalent equations but some do not.			
Describe how equivalent equations are related to the steps of solving equations.			
Explain what it means for an equation to have no solutions and recognize such an equation.			

I can...	I can	Almost	Not yet
<b>Lesson 1.8: Choosing the Correct Variable to Solve For, Part 1</b>			
Solve for a particular variable, given an equation.			
Determine the more useful form of an equation.			
Explain the phrase “to solve for a variable.”			
<b>Lesson 1.9: Choosing the Correct Variable to Solve For, Part 2</b>			
Solve an equation for one of the variables.			
<b>Lesson 1.10: Connecting Equations to Graphs, Part 1</b>			
Describe the connections between an equation of the form $ax+by=c$ , the features of its graph, and the rate of change in the situation.			
Graph linear equations of the form $ax+by=c$ .			
Demonstrate that rewriting the equation for a line in different forms can make it easier to find certain kinds of information about the relationship and about the graph.			
<b>Lesson 1.11: Connecting Equations to Graphs, Part 2</b>			
Find the slope and vertical intercept of a line with equation $ax+by=c$ .			
Take an equation of the form $ax+by=c$ and rearrange it into the equivalent form $y=mx+b$ .			
Use a variety of strategies to find the slope and vertical intercept of the graph of a linear equation given in different forms.			
<b>Lesson 1.12: Writing the Equation of a Line</b>			
Write an equation of the line given the slope and y-intercept.			

I can...	I can	Almost	Not yet
Write an equation of the line given the slope and a point.			
Write an equation of the line given two points.			
<b>Lesson 1.13: Lines from Tables and Graphs</b>			
Write equations from a point and slope.			
Write equations from two points.			
Write equations from a verbal description.			
Write equations from a table.			
<b>Lesson 1.14: Writing Equations of Parallel and Perpendicular Lines</b>			
Write an equation of a line parallel to a given line.			
Write an equation of a line perpendicular to a given line.			
Write an equation of a line parallel or perpendicular to an axis.			
Write an equation of a line in slope-intercept form given two points.			
<b>Lesson 1.15: Direct Variation</b>			
Set up and solve direct variation problems.			